

## [CMSC 425/525] In-Class: Dataflow Coverage

anything for b and c except true true

This is logic coverage exercise. Consider the following predicates:

```
a || (b && c)
(good && fast) || (good && cheap) || (fast && cheap)
```

Identify the circumstances under which each clause determines the value of the predicate. Assume that minor values will stay the same for each instance. As an example, in the first predicate, if  $b=false$ ,  $c=false$  then  $a$  determines the value of the predicate.

a is major:  
a=t, b=f, c=f  
a=f, b=f, c=f

b is major:  
a=f, b=t, c=t  
a=f, b=f, c=t

c is major:  
a=f, b=t, c=t  
a=f, b=t, c=f

"good" is major:  
good=t, fast=t, cheap=f  
good=f, fast=t, cheap=f

"fast" is major:  
good=t, fast=t, cheap=f  
good=t, fast=f, cheap=f

"cheap" is major:  
good=t, fast=f, cheap=t  
good=t, fast=f, cheap=f